

CLAIMS:

1. A method of choosing an optimal candidate value to be used for matching a block from a first image with an area from a second image, the method comprising:

(a) making a set (45) of candidate values (11, 12, 13, 14) for determining an area to be matched from the second image,

5 (b) for each candidate value from the set (45), determining an area to be matched from the second image, based on said candidate value (11, 12, 13, 14), matching the block from the first image with this area and calculating a matching error, and

(c) choosing the optimal candidate value (12) from the set (45) based on the calculated matching errors,

10 characterized in that the steps (a), (b) and (c) are repeated when, as a consequence of a change of the value of the chosen optimal candidate value (12), a rise of the attendant matching error satisfies a predetermined criterion.

2. A method as claimed in claim 1, characterized in that the predetermined

15 criterion is a percentage of the matching error of the chosen optimal candidate value (12).

3. A method as claimed in claim 1, characterized in that said rise is found by determining an inclination of a curve (10) belonging to a function of matching error plotted against candidate value.

20 4. A method as claimed in claim 3, characterized in that the predetermined criterion is a maximum for the inclination of this curve (10).

5. A system for choosing an optimal candidate value to be used for matching a

25 block from a first image with an area from a second image, the system comprising:

• a collector (43), which is arranged for making a set (45) of candidate values (11, 12, 13, 14) for determining an area to be matched from the second image,

• a matcher (46), which is arranged for determining for each candidate value from the set (45) based on said candidate value (11, 12, 13, 14) an area to be matched from the second

image, matching the block from the first image with this area and calculating a matching area, and

- a selector (47), which is arranged for choosing the optimal candidate value from the set (45) based on the calculated matching errors,

5 characterized in that the system is arranged for determining whether, as a result of a change of the value of the chosen optimal candidate value, a rise of the attendant matching error satisfies a predetermined criterion, and is arranged for activating the collector (43), the matcher (46) and the selector (47) in that case.

10 6. A system as claimed in claim 5, characterized in that the predetermined criterion is a percentage of the matching error of the chosen optimal candidate value (12).

15 7. A system as claimed in claim 5, characterized in that the system is arranged for determining said rise by determining an inclination of the curve (10) belonging to a function of matching error plotted against candidate value.

8. A system as claimed in claim 7, characterized in that the predetermined criterion is a maximum for the inclination of this curve (10).

20 9. An apparatus for processing a video signal (40) that comprises a variety of images, including:

- a system (43, 46, 47) as claimed in claim 5, 6, 7 or 8 for choosing an optimal candidate value (48) to be used for matching a block from a first image (40) with an area from a second image, the system being arranged for choosing optimal candidate values for blocks from the images from said variety, and
- an image processor (41) for processing the video signal (40) to obtain an enhanced video signal based on the obtained optimal candidate values as determined by said system (43, 46, 47).

25 30 10. An apparatus as claimed in claim 9, characterized in that the apparatus further includes a display system (42) for displaying the enhanced video signal.